In another embodiment, the agent that binds to and activates a CGRP receptor according to the present invention can be administered in conjunction with another compound or agent that is useful for treating allergen-induced airway hyperresponsiveness in the patient. Such an agent, includes, but is not limited to: corticosteroids, (oral, inhaled and injected), β-agonists (long or short acting), leukotriene modifiers (inhibitors or receptor antagonists), antihistamines, phosphodiesterase inhibitors, sodium cromoglycate, Nedocromil, and theophylline.

IN THE CLAIMS:

Please cancel Claims 2, 11, 16-19 and 31-37, without prejudice to or disclaimer of the subject matter therein.

Please amend Claims 1, 3, 15 and 27 as follows, without prejudice to or disclaimer of the subject matter therein. Claims 4-10, 12-14, 20-26 and 28-30 are reiterated below without amendment. Please add new Claims 38-41.

1. (Once Amended) A method to inhibit allergen-induced airway hyperresponsiveness in a mammal, comprising administering to a mammal an agent selected from the group consisting of calcitonin gene related peptide (CGRP), a fragment of CGRP that binds to and activates a CGRP receptor, a homologue of CGRP that binds to and activates a CGRP receptor, and a CGRP analog that binds to and activates a CGRP receptor, wherein said agent binds to and activates a calcitonin gene related peptide (CGRP) receptor in the lungs of said mammal, wherein said mammal has, or is at risk of developing, airway hyperresponsiveness, wherein administration of said agent inhibits allergen-induced airway hyperresponsiveness in said mammal.

3. (Once Amended) The method of Claim 1, wherein said mammal has been sensitized to an allergen and has been exposed to, or is at risk of being exposed to, an amount of said allergen that is sufficient to induce airway hyperresponsiveness (AHR) in said mammal in the absence of said agent.

4. (Reiterated) The method of Claim 1, wherein said method further comprises monitoring said mammal to detect whether AHR in said mammal is inhibited, wherein if

AHR is detected in said mammal, additional amounts of said agent are administered until AHR is not detected in said mammal.

5. (Reiterated) The method of Claim 1, wherein said agent is administered within a time period of between 48 hours or less prior to exposure to an AHR provoking stimulus that is sufficient to induce AHR, and within 48 hours or less after the detection of the first symptoms of AHR.

6. (Reiterated) The method of Claim 1, wherein said agent is administered upon the detection of the first symptoms of AHR.

7. (Reiterated) The method of Claim 1, wherein said agent is administered within 1 hour after the detection of the first symptoms of AHR.

8. (Reiterated) The method of Claim 1, wherein said agent is administered within 12 hours or less prior to exposure to a AHR provoking stimulus that is sufficient to induce AHR.

9. (Reiterated) The method of Claim 1, wherein said agent is administered within 2 hours or less prior to exposure to a AHR provoking stimulus that is sufficient to induce AHR.

10. (Reiterated) The method of Claim 1, wherein said agent is administered to said mammal every one to two days.

12. (Reiterated) The method of Claim 1, wherein said agent is administered at a dose of from about 0.1μg x kilogram^{-1} and about 20 μg x kilogram^{-1} body weight of said mammal.

13. (Reiterated) The method of Claim 1, wherein said agent is administered at a dose of from about 0.1 μg x kilogram^{-1} and about 10 μg x kilogram^{-1} body weight of said mammal.

14. (Reiterated) The method of Claim 1, wherein said agent is administered at a dose of from about 0.1 μg x kilogram^{-1} and about 5 μg x kilogram^{-1} body weight of said mammal.

15. (Once Amended) The method of Claim 1, wherein said analog is a product of rational drug design that binds to and activates a CGRP receptor.

20. (Reiterated) The method of Claim 1, wherein said agent is targeted to cells in the lung of said mammal selected from the group consisting of smooth muscle cells and epithelial cells.

21. (Reiterated) The method of Claim 1, wherein said agent is administered by direct delivery of said agent to the lung of said mammal.

22. (Reiterated) The method of Claim 1, wherein said agent is administered by aerosol delivery.

23. (Reiterated) The method of Claim 1, wherein said agent is administered by parenteral delivery.

24. (Reiterated) The method of Claim 1, wherein said agent is administered by oral delivery.

25. (Reiterated) The method of Claim 1, wherein administration of said agent reduces the airway hyperresponsiveness of said mammal such that the FEV_1 value of said mammal is improved by at least about 5%.

26. (Reiterated) The method of Claim 1, wherein administration of said agent prevents airway hyperresponsiveness in said mammal when administered prior to exposure of said mammal to a AHR provoking stimulus that is sufficient to induce AHR.

27. (Once Amended) The method of Claim 1, wherein said agent is administered to said mammal in conjunction with another agent selected from the group consisting of: corticosteroids, (oral, inhaled and injected), β-agonists (long or short acting), leukotriene modifiers (inhibitors or receptor antagonists), antihistamines, phosphodiesterase inhibitors, sodium cromoglycate, Nedocromil, and theophylline.

28. (Reiterated) The method of Claim 1, wherein said agent is administered to said mammal in conjunction with a CGRP receptor activity modifying protein (RAMP).

29. (Reiterated) The method of Claim 1, wherein said agent is administered in a pharmaceutically acceptable excipient.

30. (Reiterated) The method of Claim 1, wherein said mammal is a human.

Please add the following new Claims 38-41.

38. (Added) The method of Claim 1, wherein said agent is CGRP.

39. (Added) The method of Claim 1, wherein said agent is a fragment of CGRP that binds to and activates a CGRP receptor.

40. (Added) The method of Claim 1, wherein said agent is a homologue of CGRP that binds to and activates a CGRP receptor.

41. (Added) The method of Claim 1, wherein said agent is a CGRP analog that binds to and activates a CGRP receptor.